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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,949	07/21/2003	Bernd Killinger	3827.116	4622

7590 10/04/2005

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EXAMINER
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TALBOT, MICHAEL

ART UNIT	PAPER NUMBER
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3722

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/623,949	<b>Applicant(s)</b> KILLINGER ET AL.	
	<b>Examiner</b> Michael W. Talbot	<b>Art Unit</b> 3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
    4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
    a) ☒ All    b) ☐ Some \*    c) ☐ None of:
    - 1. ☒ Certified copies of the priority documents have been received.
    - 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

Refer to page 4, paragraph [00011], line 12, character reference "tapped guide bore 24" should be changed to read --tappet guide bore 24--.

Refer to page 5, paragraph [00013], line 11, character reference "indexable cutting insert 22' " should be changed to read --indexable cutting insert 20'--.

Refer to page 6, paragraph [00014], line 4, character reference "main cutting blade or edge 45" should be changed to read --main cutting blade or edge 34--.

Refer to page 6, paragraph [00015], line 2, character reference "indexable cutting inserts 22' ", 20<sup>IV</sup> " should be changed to read --indexable cutting inserts 20--.

Refer to page 6, paragraph [00015], lines 5 and 6, the phrase "The there imprinted numbers" should be changed to read --The three imprinted numbers--.

Appropriate correction is required.

### *Claim Objections*

2. Claim 2 is objected to because of the following informalities:

Refer to claim 2, line 4, an "s" should be added to the word "exhibit" to read --exhibits--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 1 recites the limitation "the active cutting edge" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the base body axis" in lines 9 and 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the various blade receptacles" in lines 17 and 18. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, it is best understood that the phrase should be changed to read --the at least two blade receptacles--.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Ueda et al. '284. Ueda et al. '284 shows in Figures 1,2,4 and 16 a tool head having a body (1), a shank (2) projecting axially beyond the base body and adapted for being coupled (9) to a rotating machine spindle (8), and at least two blade receptacles (col. 8, lines 16-18) which are spaced apart at least in the circumferential direction for receiving respective indexable cutting inserts (5B,5C) having an active cutting edge (5b,5c) exhibiting different adjustment angles (Fig. 4) relative to the base body axis (O). Ueda et al. '284 shows the indexable cutting inserts being of the same type wherein the active cutting edges are subdivided into at least two blade segments (contact edge and non-contact edge of Fig. 4) along their length and are in alignment with each other. Ueda et al. '284 shows only one of the cutting segments of the indexable cutting inserts is effective with the associated adjustment angle. Ueda et al. '284 shows the effective blade segment of the indexable cutting inserts exhibit an axial separation from each other (Fig. 4).

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Ueda et al. '284 shows the indexable cutting inserts exhibiting at least three main blade segments of which in the clamp-in condition respectively only one is active. Ueda et al. '284 shows the tool head mounted with a reamer in advance of the indexable cutting inserts and displaceable axially relative to the base body (col. 8, lines 32-36).

Claims 1-3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Berry, Jr. '406. Berry, Jr. '406 shows in Figures 7-9 a tool head (70) having a body (right of break in Fig. 7), a shank (left of break in Fig. 7) projecting axially beyond the base body and adapted for being coupled to a rotating machine spindle, and at least two blade receptacles (26,28) which are spaced apart at least in the circumferential direction for receiving respective indexable cutting inserts (82,84) having an active cutting edge (contact with workpiece) exhibiting different adjustment angles (Fig. 8) relative to the base body axis. Berry, Jr. '406 shows the indexable cutting inserts being of the same type wherein the active cutting edges are subdivided into at least two blade segments (contact edge and non-contact edge of Fig. 8) along their length and are in alignment with each other. Berry, Jr. '406 shows only one of the cutting segments of the indexable cutting inserts is effective with the associated adjustment angle. Berry, Jr. '406 shows the effective blade segment of the indexable cutting inserts exhibit an axial separation from each other (Fig. 8). Berry, Jr. '406 shows the indexable cutting inserts exhibiting at least three main blade segments of which in the clamp-in condition respectively only one is active.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Hulsebus et al. '850. Hulsebus et al. '850 shows in Figures 1,3-6 and 9-12 a tool head having a body (7), a shank (25) projecting axially beyond the base body and adapted for being coupled (23) to a rotating machine spindle, and at least two blade receptacles (31) which are spaced apart at least in the circumferential direction for receiving respective indexable cutting inserts (4) having an active cutting edge (contact with workpiece) exhibiting different adjustment angles (col. 3,

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lines 21-31) relative to the base body axis. Hulsebus et al. '850 shows the indexable cutting inserts being of the same type wherein the active cutting edges are subdivided into at least two blade segments (contact edge and non-contact edge of Fig. 1 contingent upon angle of blade 4) along their length and are in alignment with each other. Hulsebus et al. '850 shows only one of the cutting segments of the indexable cutting inserts is effective with the associated adjustment angle. Hulsebus et al. '850 shows the effective blade segment of the indexable cutting inserts exhibit an axial separation from each other (contingent upon angle of blade 4).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. '284 in view of Kress et al. '002. Ueda et al. '284 lacks specific reference to the blade receptacles including a short clamp holder rigidly connected to the base body. Kress et al. '002 shows in Fig. 3 a clamp claw (9) rigidly connect (11,21) to the base body for securing the indexable cutting inserts (col. 6, lines 50-54). In view of this teaching of Kress et al. '002, it would have been obvious to one of ordinary skill in the art to modify the blade receptacles of Ueda et al. '284 to include a clamping claw show by Kress et al. '002 to increase the contact surface area for improve securement thus limiting vibration effects and allowing indexing of the insert without complete removing of a holding screw (11).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. '284 in view of Satran et al. '878. Ueda et al. '284 lacks an imprint marking the individual cutting segments. Satran et al. '878 shows in Figs. 1A and 1E an insert (10) having indexable cutting

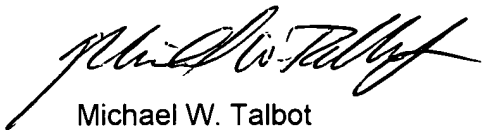
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stations identified by numerals 1-8 (col. 9, lines 50-60). In view of this teaching of Satran et al. '878, it would have been obvious to one of ordinary skill in the art to modify the cutting insert of Ueda et al. '284 to include an imprint marking shown by Satran et al. '878 to provide visual confirmation of the different cutting inserts for ease of tracking the active cutting edges and improve reliability when indexing the inserts to a new cutting segment.

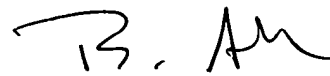
7. Any inquiry concerning the content of this communication from the examiner should be directed to Michael W. Talbot, whose telephone number is 571-272-4481. The examiner's office hours are typically 8:30am until 5:00pm, Monday through Friday. The examiner's supervisor, Mr. Boyer D. Ashley, may be reached at 571-272-4502.

In order to reduce pendency and avoid potential delays, group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at FAX number 571-273-8300. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers, which require a fee, by applicants who authorize charges to a USPTO deposit account.

Please identify Examiner Michael W. Talbot of Art Unit 3722 at the top of your cover sheet.



Michael W. Talbot  
Examiner  
Art Unit 3722  
26 September 2005



BOYER D. ASHLEY  
PRIMARY EXAMINER